



Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
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D350-561-141
Job Sheet 188077



order 1240 524
007467

Part No: D350-561-141

Job Qty: 1 pcs

Part Name: Single Mirror Installation RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/2/19

Job Tracking No:

Due Date: 1/31/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV N/A IPP A 07.07.26 new issue (DSI9379) EC verified by:JLM IPP rev B 10.02.16 per ecn 10-523
EC verified by: DD IPP Rev:C add pick kit DD 10.03.15 verified by:EC IPP Rev:D 10.09.14 per IIN revD DD
verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
105	Packaging 1 - Pick Kit	1 pcs		1/31/19	0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4		
							Packaging 1 - 5		
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23		
							Packaging 1 - 24		
							Packaging 1 - 25		
							Packaging 1 - 26		
							Packaging 1 - 27		
							Packaging 1 - 28		
							Packaging 1 - 29		
							Packaging 1 - 30		
							Packaging 1 - 31		



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Container No: S145799



Part: D350-561-141

Job No: 188077

Serial No/Batch: S145799

Revision:

Inspector:

Exp Date:

Instructions: TC STC SH91-20 Issue 3, FAA STC SH856NE 10/10/21, EASA ST

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

110	QC 4	1 pcs	1/31/19	0.00 0.00	Packaging 1 - 32	
					Packaging 1 - 33	
					Packaging 1 - 34	
					Packaging 1 - 35	
					QC 4 - 26	
					QC 4 - 28	
					QC 4 - 38	
					QC 4 - 42	
					QC 4 - 58	
					QC 4 - 6	DAS 69 9-89
120	Packaging 3-1 - Stock - B4B	1 pcs	1/31/19	0.00 0.00	QC 4 - 69	DAS 69 9-89
					QC 4 - 9	
					QC 4 - 46	DAS 69 9-89
					Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
125	DC - 1 - B4B	1 pcs	1/31/19	0.00 0.00	DC - 1 - B4B	JAN 17 2019 DAS 70 9-89
					DC - 2 - B4B	
130	QC 21 - FG	1 pcs	1/31/19	0.00 0.00	QC 21 - FG - 21	JAN 17 2019 DAS 70 9-89
					QC 21 - FG - 70	

Part Op 105 - Pick Kit
 Descriptions: 110 - QC4- 100% Inspect kits for completeness
 120 - Identify and pack for shipping as per PPP D350-561-141 LOCATION: FG011
 125 - Document Control - Photocopy bluefile and create labels per PPP D350-561-141 CHG003
 130 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :			MRB (QSI042)
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor
					QC / QA Coordinator
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details: _____					

②

AN3-5A	Bolt	6 Ea (6 ea)	105-Packaging 1 - Pick Kit	5095480-1
AN3-6A	Bolt	1 Ea (1 ea)	105-Packaging 1 - Pick Kit	5103950.
AN4-10A	Bolt	1 Ea (1 ea)	105-Packaging 1 - Pick Kit	5082908
AN4-5A	Bolt	3 Ea (3 ea)	105-Packaging 1 - Pick Kit	5140392
D2011-101	Mirror 6"	1 Ea (1 ea)	105-Packaging 1 - Pick Kit	5123595.
D2012-105	Arm (31.06)	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5141744
D2012-107	Clevis	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5071965
D2012-111	Bracket	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	3114674.
D2012-115	Bracket, Clevis	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5128499
D2022-101	Spacer	2 pcs (2 ea)	105-Packaging 1 - Pick Kit	5126033
D3629-1	Bracket	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5081675
D3635-1	Gasket	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5078833
D3646-1	Arm	1 pcs (1 ea)	105-Packaging 1 - Pick Kit	5084408
D3646-3	Arm	1 Ea (1 ea)	105-Packaging 1 - Pick Kit	5109386.
D4070-041	Clamp	2 pcs (2 ea)	105-Packaging 1 - Pick Kit	5091686.
MS21042L3	Nut	4 Ea (4 ea)	105-Packaging 1 - Pick Kit	5132364
MS21042L4	Nut	4 Ea (4 ea)	105-Packaging 1 - Pick Kit	5129970.
NAS1149D0363J	Washer	8 Ea (8 ea)	105-Packaging 1 - Pick Kit	5107782.
NAS1149D0463J	Washer	8 Ea (8 ea)	105-Packaging 1 - Pick Kit	5129985

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
105-Packaging 1 - Pick Kit	AN3-5A	6	168	0
	AN3-6A	1	146	0
	AN4-10A	1	62	0
	AN4-5A	3	124	0
	D2011-101	1	22	0
	D2012-105	1	1	0
	D2012-107	1	28	0
	D2012-111	1	17	0
	D2012-115	1	0	0
	D2022-101	2	34	0
	D3629-1	1	7	0
	D3635-1	1	8	0
	D3646-1	1	3	0
	D3646-3	1	2	0
	D4070-041	2	19	0
	MS21042L3	4	2,569	0
	MS21042L4	4	1,895	0
	NAS1149D0363J	8	1,895	0
	NAS1149D0463J	8	3,598	0

Part Specifications

Specifications could not be found.

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-561 REV. C

REF. CANADIAN STC: SH91-20 ISSUE 2

REF. FAA STC: SH856NE

REFERENCE ONLY

To reduce vibration, Dart has developed the D350-561-141/-143 Mirror Installations to replace the D350-561-041/-043 Mirror Installations. For customers with D350-561-041/-043 Mirror Installations at CHG 005 or earlier who would like to upgrade their installation, the DSI 9379-011 Upgrade Kit can be obtained from Dart. The components for DSI 9379-011 Kit are as defined in Section 1.0 below.

Customers upgrading their installation from D350-561-041/-043 to D350-561-141/-143 should follow instructions given in Figures 1 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

Customers who are installing a D350-561-141/-143, should refer to Figures 2 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

This service instruction details the D350-561-141/-143 kits at CHANGE 003 or later, which use D4070-041 Clamps (replaces MS21919WDG7 clamps). For -141/-143 kits at earlier change numbers, the DSI-9379-013 Upgrade kit is available to replace the mil-spec clamps with more robust D4070-041 Clamps.

1.0 PARTS LIST

Qty -141	Qty -143	Qty -045	Qty -011	Qty -013	Part Number	Description
X	1				D350-561-141	SINGLE MIRROR INSTALLATION (REPLACES -041)
	X				D350-561-143	DUAL MIRROR INSTALLATION (REPLACES -043)
	1	X			D350-561-045	MIRROR KIT
			X		DSI-9379-011	UPGRADE KIT
				X	DSI-9379-013	UPGRADE KIT
1		1			D2011-101	MIRROR
1					D2012-105	ARM
1					D2012-107	CLEVIS
1					D2012-111	BRACKET
		2			D2012-113	CLAMP
1					D2012-115	BRACKET
2					D2022-101	SPACER
1*		1*			D3014-1	LOCKNUT
1			1		D3629-1	BRACKET
1			1		D3635-1	GASKET
2			2		D3635-3	GASKET
1			1		D3646-1	ARM
1			1		D3646-3	ARM
2			2	2	D4070-041	CLAMP
3			3		AN3-4A	BOLT
1					AN3-6A	BOLT
3			2	2	AN4-5A	BOLT
1					AN4-10A	BOLT
8			6		AN960JD10	WASHER
8			4	4	AN960JD416	WASHER
1*		1*			AN960JD416L	WASHER
4			3		MS21042L3	NUT (OR MS21042-3)
4			2	2	MS21042L4	NUT (OR MS21042-4)

*INCLUDED AS PART OF D2011-101 MIRROR

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 10.02.12

CERT. NO.: SH91-20

ISSUE NO.: 2

C	D4070-041 WAS MS21919WDG7	CP	10.02.12
B	MS21919WDG7 WAS MS21929WDG7	DC	07.11.26
A	NEW ISSUE	MB	07.07.10
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9379	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		CARGO MIRROR UPDRAGE KIT	NTS
DATE	10.02.12	COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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5. PARTS LIST

Qty -041	Qty -043	Qty -045	Qty -141	Qty -143	Qty -241	Qty -243	Part Number	Description
X	1						D350-561-041	SINGLE MIRROR INSTALLATION, RH
	X						D350-561-043	DUAL MIRROR INSTALLATION, RH
	1	X		1		1	D350-561-045	MIRROR KIT
			X	1			D350-561-141	SINGLE MIRROR INSTALLATION, RH
				X			D350-561-143	DUAL MIRROR INSTALLATION, RH
					X	1	D350-561-241	SINGLE MIRROR INSTALLATION, LH
						X	D350-561-243	DUAL MIRROR INSTALLATION, LH
1		1	1		1		D2011-101	Mirror
1							D2012-101	Arm
1							D2012-103	Arm
1			1				D2012-105	Arm
					1		D2012-106	Arm
2			1		1		D2012-107	Clevis
1							D2012-109	Bracket
1			1		1		D2012-111	Bracket
4		2					D2012-113	Clamp
1			1		1		D2012-115	Bracket
4			2		2		D2022-101	Spacer
4							D2856-100-325	Abrasion Strip
1*		1*	1*		1*		D3014-1	Locknut
			1		1		D3629-1	Bracket
			1		1		D3635-1	Gasket
		2					D3635-3	Gasket
			1				D3646-1	Arm
					1		D3646-2	Arm
			1				D3646-3	Arm
					1		D3646-4	Arm
			2		2		D4070-041	Clamp
2							AN3-4A	Bolt
2		2	6		6		AN3-5A	Bolt
1			1		1		AN3-6A	Bolt
2			1		1		AN4-10A	Bolt
3			3		3		AN4-5A	Bolt
14		4	8		8		AN960JD10	Washer
9		2	8		8		AN960JD416	Washer
1*		1*	1*		1*		AN960JD416L	Washer
5		2	4		4		MS21042L3	Nut (or MS21042-3)
5			4		4		MS21042L4	Nut (or MS21042-4)

*INCLUDED AS PART OF D2011-101 MIRROR

REFERENCE ONLY